Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for removing low molecular weight hydrocarbons from an exhaust gas of an internal combustion engine, the method comprising:

a) contacting the exhaust gas with a water-removing composition; and

b) contacting the exhaust gas at a position downstream from the water-removing composition with a hydrocarbon-removing material to remove at least some of the hydrocarbons from the exhaust gas;

wherein the hydrocarbon-removing material has a sufficiently low Si to Al atom ratio that less than about 50% of the low molecular weight hydrocarbons desorb from the hydrocarbon-removing material at a temperature of about 250°C and wherein significant desorption of the low molecular weight hydrocarbons does not occur until a sufficiently high temperature is attained so that the low molecular weight hydrocarbons can be converted to innocuous species by a catalyst.

2. (Original) The method of claim 1 wherein the hydrocarbon-removing material has a sufficiently low Si to Al atom ratio that less than about 50% of the low molecular hydrocarbons desorb from the hydrocarbon-removing composition at a temperature of about 275°C.

3. (Original) The method of claim 1 wherein the hydrocarbon-removing material has a sufficiently low Si to Al atom ratio that less than about 50% of the low molecular hydrocarbons desorb from the hydrocarbon-removing composition at a temperature of about 300°C.

4. (Original) The method of claim 1 wherein the hydrocarbon-removing material is a zeolite.

5. (Original) The method of claim 1 wherein the hydrocarbon-removing material is a pentasil zeolite, a faujasite zeolite, mordenite, a beta zeolite, ferrierite, a mesopore zeolite, or mixtures thereof.

6. (Original) The method of claim 1 wherein the hydrocarbon-removing material is a zeolites having a Si to Al atom ratio less than about 25.

7. (Original) The method of claim 1 wherein the hydrocarbon-removing material is a zeolites having a Si to Al atom ratio less than about 15.

8. (Original) The method of claim 1 wherein the hydrocarbon-removing material is a zeolites having a Si to Al atom ratio less than about 10.

9. (Original) The method of claim 1 wherein the water-removing composition removes water vapor but not medium-sized hydrocarbons from the exhaust gas.

10. (Original) The method of claim 1 wherein the water-removing composition comprises a hydrophilic material.

11. (Original) The method of claim 10 wherein the hydrophilic material has a pore size of about 2 to about 5 angstroms in diameter.

12. (Original) The method of claim 10 wherein the hydrophilic material has a pore size of about 4 angstroms in diameter.

13. (Original) The method of claim 10 wherein the hydrophilic material is selected from the group consisting of molecular sieves, aluminas, silicas, zeolites, and mixtures thereof.

14. (Currently Amended) A vehicle exhaust system, comprising: a water trap; and a hydrocarbon trap comprising a hydrocarbon-removing material having a sufficiently low Si to Al atom ratio that less than about 50% of the low molecular weight hydrocarbons desorb from the hydrocarbon-removing composition at a temperature of about 250°C and wherein significant desorption of the low molecular weight hydrocarbons does not occur until a sufficiently high temperature is attained so that the low molecular weight hydrocarbons can be converted to innocuous species by a catalyst; wherein the hydrocarbon trap is located downstream of the water trap in the vehicle exhaust system.

15. (Original) The vehicle exhaust system of claim 14 wherein the hydrocarbon-removing material has a sufficiently low Si to Al atom ratio that less than about 50% of the low molecular hydrocarbons desorb from the hydrocarbon-removing composition at a temperature of about 275°C.

16. (Original) The vehicle exhaust system of claim 14 wherein the hydrocarbon-removing material has a sufficiently low Si to Al atom ratio that less than 50% of the low molecular hydrocarbons desorb from the hydrocarbon-removing composition at a temperature of 300°C.

17. (Original) The vehicle exhaust system of claim 14 wherein the hydrocarbon-removing material is a zeolite.

18. (Original) The vehicle exhaust system of claim 14 wherein the hydrocarbon-removing material is a pentasil zeolite, a faujasite zeolite, mordenite, a beta zeolite, ferriete, a mesopore zeolite, or mixtures thereof.

19. (Original) The vehicle exhaust system of claim 14 wherein the hydrocarbon-removing material is a zeolites having a Si to Al atom ratio less than about 25.

20. (Original) The vehicle exhaust system of claim 14 wherein the hydrocarbon-removing material is a zeolites having a Si to Al atom ratio less than about 15.

21. (Original) The vehicle exhaust system of claim 14 wherein the hydrocarbon-removing material is a zeolites having a Si to Al atom ratio less than about 10.

22. (Original) The vehicle exhaust system of claim 14 wherein the water trap removes water vapor but not medium-sized hydrocarbons from the exhaust gas.

23. (Original) The vehicle exhaust system of claim 14 wherein the water trap comprises a hydrophilic material.

24. (Original) The vehicle exhaust system of claim 23 wherein the hydrophilic material has a pore size of about 2 to about 5 angstroms in diameter.

25. (Original) The vehicle exhaust system of claim 23 wherein the hydrophilic material has a pore size of about 4 angstroms in diameter.

26. (New) The method of claim 1 wherein greater than 90% of the low molecular weight hydrocarbons desorb at temperature of about 400° C or greater.

27. (New) The method of claim 1 wherein greater than 90% of the low molecular weight hydrocarbons desorb at temperature of about 500° C or greater.

28.(New) The vehicle exhaust system of claim 1 wherein greater than 90% of the low molecular weight hydrocarbons desorb at temperature of about 400° C or greater.

29.(New) The vehicle exhaust system of claim 1 wherein greater than 90% of the low molecular weight hydrocarbons desorb at temperature of about 500° C or greater.